



Wylfa Newydd Project

6.7.3 ES Volume G - A5025 Off-line Highway Improvements G3 - Socio-economics

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3 Socio-economics

3.1 Introduction

- 3.1.1 This chapter describes the assessment of potential socio-economic effects resulting from the construction and operation of the A5025 Off-line Highway Improvements.
- 3.1.2 This chapter excludes project-wide socio-economic effects such as employment and locally created jobs, which are considered in the assessment contained within chapter C1 (socio-economics) (Application Reference Number 6.3.1). Volume F of the Welsh Language Impact Assessment (WLIA) (Application Reference Number 8.21) details the assessment of potential effects of the A5025 Off-line Highway Improvements on Welsh language and culture in terms of the neighbouring community. Therefore, the assessment of these is not included here.
- 3.1.3 Please refer to chapter B2 (introduction to the environmental assessments - socio-economics) (Application Reference Number 6.2.2) for the technical basis for the assessment including a summary of legislation, policy and guidance; key points arising in consultation that have guided the socio-economic assessment; and assessment methodologies and criteria.

3.2 Study area

- 3.2.1 This section describes the study areas relevant to the socio-economic assessment for the A5025 Off-line Highway Improvements.
- 3.2.2 The study area for agricultural land for each section of the A5025 Off-line Highways Improvements comprises the area falling within 1km of the Development Consent Order (DCO) Order Limits (hereafter referred to as the Local Area of Influence (LAI)). In addition, the extension of land within the field boundary of each land interest or land plot outside of the 1km distance will also be considered part of the study area.

Section 1: Valley

- 3.2.3 Valley ward is considered the most appropriate study area for the assessment of crime levels, as it is the closest community catchment to the section for which data are available. The study area is presented on figure G3-1a.

Section 3: Llanfachraeth

- 3.2.4 Llanfaethlu ward is considered the most appropriate study area for the assessment of crime levels, as it is the closest community catchment to the section for which data are available. The study area, including that for agricultural land, is presented on figure G3-1b.

Section 5: Llanfaethlu

- 3.2.5 Llanfaethlu ward is considered the most appropriate study area for the assessment of crime levels, as it is the closest community catchment to the

section for which data are available. The study area, including that for agricultural land, is presented on figure G3-1c.

Section 7: Cefn Coch

- 3.2.6 Mechell ward is considered the most appropriate study area for the assessment of crime levels, as it is the closest community catchment to the section for which data are available. The study area, including that for agricultural land, is presented on figure G3-1d.

Wylfa Newydd Power Station Access Road Junction

- 3.2.7 Mechell ward is considered the most appropriate study area for the assessment of crime levels, as it is the closest community catchment to the section for which data are available. The study area, including that for agricultural land, is presented on figure G3-1e.

3.3 Baseline environment

- 3.3.1 This section provides a summary of the baseline conditions for socio-economics within the study areas described in section 3.2.
- 3.3.2 The current baseline conditions were informed through the following reviews:
- aerial photography and digital Ordnance Survey (OS) maps;
 - interrogation of the Jacobs' geographic information system database;
 - police.uk website [RD1], [RD2], [RD3];
 - Office for National Statistics website [RD4];
 - online searches for local services and local businesses;
 - information provided by Fisher German [RD5] in relation to landownership;
 - relevant planning applications on the Isle of Anglesey County Council website [RD6];
 - Isle of Anglesey County Council and Gwynedd Joint Local Development Plan 2011-2026 [RD7]; and
 - survey data from Reading Agricultural Consultants Ltd following an Agricultural Land Classification (ALC) survey of each study area [RD8].
- 3.3.3 The land-take assessment is based on the landownership information provided by Fisher German.
- 3.3.4 Relevant consented, or yet to be determined, planning applications submitted between 1 December 2014 and valid up to and including December 2017 (i.e. within a three-year implementation timeframe) were also considered in the baseline. These planning applications excluded the following application types relating to minor works or procedural aspects that would not alter the receptors captured in the existing baseline:
- householder applications for improvements/extensions;

- local commercial and business applications for minor improvement works and alterations;
- change of use;
- applications for advertisement consent;
- enforcement actions; and
- applications that have been withdrawn or refused.

Section 1: Valley

Neighbouring communities and local services

- 3.3.5 Valley - Y Fali (hereafter referred to as 'Valley'), with a population of just over 2,000 (at least 54.7% of whom are considered to be Welsh speakers according to ward-level census data), is the main settlement within the study area which is located near to Holyhead - Caergybi at the western end of the A5025. Valley has a number of community facilities, including a primary school and pharmacy, located within the village. The settlement is situated approximately 8km from the centre of Holyhead – Caergybi which is a six-minute drive.
- 3.3.6 The majority of residential properties in the area are located within the settlement of Valley. In addition, there are several smallholdings and farms located along the A5, A55 and A5025.
- 3.3.7 Local services within the study area include Valley pharmacy (SB Carr Ltd), two places of worship, one cemetery, Valley train station, Valley Police Station and an area of open space which is adjacent to a primary school (Ysgol Gymuned Y Fali). Their locations are displayed on figure G3-1a.

Public safety

- 3.3.8 Outlined below is the current baseline in respect to public safety and the occurrence of crime specifically in regard to section 1 of the A5025 Off-line Highway Improvements.
- 3.3.9 According to police statistics [RD1] between January 2016 and December 2016, there were 141 crimes reported in Valley. The month with the highest number of crimes reported was September 2016 as shown in table G3-1. Anti-social behaviour was the most frequent crime reported across the year.

Table G3-1 Crimes reported in Valley [RD1]

Month	Number of crimes	Nature of crimes
January 2016	6	Criminal damage and arson, violence/sexual offences and shoplifting
February 2016	13	Anti-social behaviour, violence/sexual offences and shoplifting

Month	Number of crimes	Nature of crimes
March 2016	15	Criminal damage and arson, anti-social behaviour, violence/sexual offences, public order, shoplifting and other crime
April 2016	15	Anti-social behaviour, violence/sexual offences, burglary, drugs, shoplifting, public order and other theft
May 2016	6	Anti-social behaviour, violence/sexual offences, public order, shoplifting and burglary
June 2016	11	Criminal damage and arson, violence/sexual offences, anti-social behaviour, shoplifting, vehicle crime, bicycle theft and other theft
July 2016	15	Violence/sexual offences, anti-social behaviour, shoplifting and other theft
August 2016	10	Criminal damage and arson, violence/sexual offences, anti-social behaviour and shoplifting
September 2016	16	Criminal damage and arson, violence/sexual offences, anti-social behaviour, shoplifting and other theft
October 2016	10	Criminal damage and arson, violence/sexual offences, anti-social behaviour and shoplifting
November 2016	13	Violence/sexual offences, anti-social behaviour, drugs and shoplifting
December 2016	11	Criminal damage and arson, violence/sexual offences, anti-social behaviour and shoplifting

3.3.10 More widely and according to the Office for National Statistics [RD4], North Wales had a total recorded crime rate (excluding fraud) of 58.6 per 1,000 population in 2016. This crime rate was lower than the Welsh national rate of 64.4 per 1,000 population which is also considerably lower than the combined rate across England and Wales (71.9). The crime category of 'violence against the person' recorded a rate of 19.4 per 1,000 population, while 'theft offences' reported a proportionally higher rate of 20.4.

3.3.11 Table G3-2 shows the trend in the total number of crimes reported between 2012 and 2016. Between 2012 and 2016 there was an 8% drop in the number of crimes. Overall there is no clear trend visible and the number of crimes reported fluctuates between 2012 and 2016.

Table G3-2 Trend data in Valley 2012–2016 [RD1]

Year	2012	2013	2014	2015	2016
Total number of crimes	153	143	90	118	141

Local businesses

3.3.12 Local businesses are mainly situated within the settlement of Valley. Table G3-3 below shows the number of businesses found within the study area, and their location.

Table G3-3 Local businesses within the study area of section 1: Valley

Business	Description	Location
Shan's A5 Barbers Shop	Hairdressers	Station Road, Valley, LL65 3EB
Valley Kebab and Pizza	Takeaway	The Square, Valley, LL65 3DP
Moduron Fali Valley Motors	Car repair	London Road, Valley, LL65 3DR
Griffith Roberts & Son	Funeral director	Preswylfa Chapel of Rest, Valley, LL65 3EA
The Valley Hotel	Hotel	London Road, Valley, LL65 3DU
Dyffryn Service Station	Service station	Valley, LL65 3DP
Valley Post Office	Post office	Station Road, Valley, LL65 3EB
Relish Café and Sandwich Bar	Café and sandwich bar	18 B4545, Valley, LL65 3EB
Sunny Valley	Takeaway	London Road, Valley, LL65 3DP
Enochs Fish and Chips	Takeaway	London Road, Valley, LL65 3DP
Valley Spar	Convenience store	Station Road, Valley, LL65 3EB
Bex Pride	Restaurant	Unit 7/Valley Precinct/Station Road, Valley, LL65 3EB
Cigydd Y Fali Butchers	Butchers	The Old Courthouse, Station Road, Valley, LL65 3EB
Bull Hotel	Hotel	London Road, Valley, LL65 3DP
TR Jones & Sons	Heating oil supplier	Field Street, Valley, LL65 3EG
Michael Roberts Hair Salon	Hairdresser	Station Road, Valley, LL65 3EB
Plas Dyffryn Residential Care Home	Residential care home	Station Road, Valley, LL65 3EL

Business	Description	Location
traxVault backing tracks	Retail (music shop)	Rhodfa Shorney, Valley, LL65 3DW
Gwalia Service Station	Service station	Holyhead Road, Valley, LL65 3DR
Cleifiog Uchaf Hotel	Hotel	Cleifiog Uchaf, Valley, LL65 3AB
Summit to Sea	Retail (outdoor clothing and equipment shop)	The Old School, London Road, Valley, LL65 3DP
Freight Yard	Railway yard	Holyhead Road, Valley, LL65
Ty Mawr Bed & breakfast	Bed & breakfast	Ty Mawr Farm, Valley, LL65 3HH

Land use

Agricultural land

- 3.3.13 The predominant land use in the study area is agriculture. The land supports a limited range of upland agricultural systems with livestock production (cattle and sheep) as the main farming type.
- 3.3.14 The predominant land class in the study area is poorer quality (Grade 4) non-Best and Most Versatile (BMV) agricultural land. The land class within the extent of land-take is Grade 4 (poorer quality non-BMV agricultural land) which is illustrated on figure G3-2a (Application Reference Number: 6.7.48).
- 3.3.15 There are four agricultural land interests in the study area which are directly affected by the A5025 Off-line Highway Improvements (as outlined in table G3-4). The baseline data collated by Fisher German [RD5] were used to give an individual sensitivity assessment for the land interest affected by section 1 (refer to figure G3-2a (Application Reference Number: 6.7.48) for land interests). The sensitivity assessment for each land interest is detailed in table G3-4.

Table G3-4 Agricultural sensitivity assessment – Valley

Land interest (reference)	Agricultural activity	Overall sensitivity
Ynys Wen (10120, 10213 and 20603)	Cattle and sheep farm. Land plot extending to 20ha. ALC Grade 4.	Low
Cleifiog Isaf (20602 and 10130)	Cattle and sheep farm. Land plot extending to 60ha. ALC Grade 4.	Low
Land at Valley	Cattle and sheep farm.	Medium

Land interest (reference)	Agricultural activity	Overall sensitivity
(10210)	Potential cropping. Land plot extending to 35ha. ALC Grade 4. Other business interests include a bed & breakfast.	
Land South of Holyhead Road (40040)	Area of grassland. Land plot extending to 17ha. ALC Grade 4.	Low

Development land and planning applications

- 3.3.16 There are 16 planning applications and two development land allocations within the study area. A summary of development land and planning applications in the study area is provided in appendix G3-1 (Development Land and Planning Applications) (Application Reference Number: 6.7.15). Their locations, in relation to section 1, are shown on figure G3-1a (Application Reference Number: 6.7.48).
- 3.3.17 One of the planning applications within the study area relates to the A5025 Off-line Highway Improvements. This planning application (reference 27C106/FR) was submitted for proposed ground investigation works at four separate locations: Junction 3 A55 Valley, Llanfachraeth, Llanfaethlu and Cefn Coch. As this planning application relates to the A5025 Off-line Highway Improvements, it has been scoped out of the assessment.
- 3.3.18 Another planning application, submitted in December 2017, relates to the A5025 Online Highway improvements. The development covered by this planning application (reference 27C106E/FR/ECON) has been designed in coordination with the A5025 Off-line Highway Improvements, therefore it has been scoped out of the assessment.
- 3.3.19 In addition, one of the development land allocations within the study area of section 1, section 3, section 5 and section 7 is designated as an A5025 improvement area (as outlined in the Joint Local Development Plan 2011-2026 [RD7]). As this relates to the A5025 Off-line Highway Improvements, it has been scoped out of the assessment.

Section 3: Llanfachraeth

Neighbouring communities and local services

- 3.3.20 The main settlement within the study area includes Llanfachraeth which is located to the west of section 3. It has a population of just under 600 people (at least 64.4% of whom are considered to be Welsh speakers according to ward-level census data) and the town features various residences, businesses, churches and a school. The A5025 is important to the interconnectivity of this town, as the population relies on services in other locations. The settlement is situated approximately 12km from the centre of Holyhead (Caergybi) which is an 11-minute drive.

- 3.3.21 The majority of residential properties in the area are located within the settlement of Llanfachraeth. In addition, there are several smallholdings, such as Llanynghenedl and farm steadings located along the existing A5025.
- 3.3.22 Local services within the study area include a village hall, three places of worship, an area of open space located at the back of the village hall and a former primary school (Ysgol Gynradd Llanfachraeth). This primary school closed after the 2016/2017 school year, with pupils transferring to a new community primary school (Ysgol Rhyd Llan) in Llanfaethlu which became operational in September 2017. Their locations are displayed on figure G3-1b.

Public safety

- 3.3.23 Below is an outline of the current baseline in respect to public safety and the occurrence of crime specifically in regard to section 3 of the A5025 Off-line Highway Improvements.
- 3.3.24 According to police statistics [RD2] between January 2016 and December 2016, there were 75 crimes reported in Llanfaethlu. The month with the highest number of crimes reported was June 2016 as shown in table G3-5. Anti-social behaviour was the most frequent crime reported across the year.

Table G3-5 Crimes reported in Llanfaethlu [RD2]

Month	Number of crimes	Nature of crimes
January 2016	8	Anti-social behaviour, criminal damage and arson, violence/sexual offences, vehicle crime and other theft
February 2016	1	Other theft
March 2016	5	Anti-social behaviour, violence/sexual offences and other theft
April 2016	6	Anti-social behaviour, criminal damage and arson, burglary and shoplifting
May 2016	9	Criminal damage and arson, violence/sexual offences, anti-social behaviour, other crime and other theft
June 2016	15	Criminal damage and arson, anti-social behaviour, burglary, drugs, theft from the person and other theft
July 2016	5	Violence/sexual offences and anti-social behaviour
August 2016	6	Violence/sexual offences, anti-social behaviour, bicycle theft and burglary
September 2016	4	Anti-social behaviour, criminal damage and arson and violence/sexual offences

Month	Number of crimes	Nature of crimes
October 2016	5	Anti-social behaviour, criminal damage and arson and violence/sexual offences
November 2016	6	Anti-social behaviour, other theft and vehicle crime
December 2016	5	Anti-social behaviour, criminal damage and arson, violence/sexual offences and public order

- 3.3.25 The total number of crimes reported in 2016 in Llanfaethlu, 75, is less than the total number of crimes reported in Valley, 141 (as shown in table G3-2). Although this equates to almost half the number of crimes reported in Valley, the number of crimes per head of the ward population of Valley (section 1) is the same as the ward of Llanfaethlu.
- 3.3.26 North Wales crime rates per 1,000 population as outlined in paragraph 3.3.10 are also relevant to providing wider contextualisation for the occurrence of crime with respect to section 3 and so this baseline information will not be repeated here.
- 3.3.27 Table G3-6 shows the trend in the total number of crimes reported between 2012 and 2016. Between 2012 and 2016 there was a 14% drop in the number of crimes. Overall there is no clear trend visible and the number of crimes reported fluctuates between 2012 and 2016.

Table G3-6 Trend data in Llanfaethlu 2012–2016 [RD2]

Year	2012	2013	2014	2015	2016
Total number of crimes	87	73	74	51	75

Local businesses

- 3.3.28 Local businesses are mainly situated within the settlement of Llanfachraeth. Table G3-7 below shows the number of businesses found within the study area, and their location.

Table G3-7 Local businesses within the study area of section 3: Llanfachraeth

Business	Description	Location
Holland Hotel	Hotel	Valley Road, Llanfachraeth, LL65 4UH
Llanfachraeth Post Office	Post office	Llanfachraeth, Holyhead, LL65 4UL
Wynnstey Country Store	Retail	Elim Stores, Llanfachraeth, Holyhead, LL65 4UP

Business	Description	Location
Dronwy Caravan Park	Caravan park	Llanfachraeth, Holyhead, LL65 4YB
Penyrsedd Farmhouse Bed & Breakfast	Bed & breakfast	Penyrsedd Farm, Llanfachraeth, LL65 4YB
The Old Rectory	An alternative and holistic health service	Llanfachraeth, Holyhead

Land use

Agricultural land

- 3.3.29 The predominant land use in the study area is agriculture. The land supports a limited range of upland agricultural systems with livestock production (cattle and sheep) as the main farming type.
- 3.3.30 There is a range of land classes in the study area from good quality BMV agricultural land (Grade 2) to poor quality (Grade 5) non-BMV agricultural land. The predominant land class within the extent of land-take is Grade 3a (good quality BMV agricultural land) as shown on figure G3-2b (Application Reference Number: 6.7.48).
- 3.3.31 Collectively, there are seven agricultural land interests in the study area which are directly affected by the A5025 Off-line Highway Improvements (as outlined in table G3-8). The baseline data collated by Fisher German [RD5] were used to give an individual sensitivity assessment for each land interest affected by section 3 (refer to figure G3-2b for land interests). The sensitivity assessments for each land interest are detailed in table G3-8.

Table G3-8 Agricultural sensitivity assessment – Llanfachraeth

Land interest (reference)	Agricultural activity	Overall sensitivity
Erw Fawr (10080)	Dairy farm. Land plot extending to 57ha. ALC Grade 2, Grade 3a and Grade 3b.	High
Erw Goch (10010)	Cattle and sheep farm. Land plot extending to 51ha. ALC Grade 2, Grade 3a, Grade 3b and Grade 4.	Medium
Llanllibio (10030)	Cattle and sheep farm. Land plot extending to 16ha. ALC Grade 4.	Low
Bedo (10020)	Cattle and sheep farm. Land plot extending to 16ha.	Medium

Land interest (reference)	Agricultural activity	Overall sensitivity
	ALC Grade 2, Grade 3a and Grade 3b.	
Pen-yr-Orsedd (10050)	Cattle and sheep farm. Land plot extending to 27ha. Cropping includes barley. ALC Grade 2, Grade 3a and Grade 3b. Other business interests include a bed & breakfast.	High
Land at Llanfachraeth (20030)	Cattle and sheep farm. Land plot extending to 19ha. ALC Grade 4.	Low
Land at Bryn Farm (30011)	Grassland used for livestock grazing Land plot extending to 169ha. ALC Grade 5.	Low

Development land and planning applications

- 3.3.32 There are 15 planning applications and one development land allocation within the study area. A summary of the development land and planning applications is provided in appendix G3-1 (Application Reference Number: 6.7.15). Their locations, in relation to section 3, are shown on figure G3-1b.

Section 5: Llanfaethlu

Neighbouring communities and local services

- 3.3.33 The main settlement within the study area includes Llanfaethlu which is located immediately west of section 5. Llanfaethlu is a small village, with a population of approximately 550 (with the same proportion of Welsh speakers as Section 3), located in the north-west of Anglesey, approximately 1.5km south of Llanrhuddlad. The settlement is situated approximately 18km from the centre of Holyhead - Caergybi which is a 17-minute drive.
- 3.3.34 The majority of residential properties in the area are located within the settlement of Llanfaethlu. In addition, there are several farms located along the existing A5025.
- 3.3.35 Local services within the study area include three places of worship and an area of open space which is situated approximately 400m west of the existing A5025. Their locations are displayed on figure G3-1c.
- 3.3.36 As highlighted in paragraph 3.3.21, a new community primary school has been constructed within the village of Llanfaethlu, approximately 150m west of the existing A5025. This school opened in September 2017 with an access point within the village, away from the existing or upgraded A5025.

Public safety

- 3.3.37 The baseline information for public safety for section 5 is covered in paragraphs 3.3.22 to 3.3.26 as Llanfaethlu ward covers both study areas for section 3 and section 5.

Local businesses

- 3.3.38 Local businesses are mainly situated surrounding the settlement of Llanfaethlu. Table G3-9 below shows the number of businesses found within the study area, and their location.

**Table G3-9 Local businesses within the study area of section 5:
Llanfaethlu**

Business	Description	Location
The Black Lion Inn	Inn	Llanfaethlu, Holyhead, LL65 4NL
Ca'er Bryniau Boutique Bed & Breakfast	Bed & breakfast	Llanfaethlu, Holyhead, LL65 4NN
Llanfaethlu Post Office	Post office	Llanfaethlu, Holyhead, LL65 4NP
Coffee House Shop	Café	Llanfaethlu, Holyhead, LL65 4NP
Ty Top Holiday Cottage	Holiday cottage	Llanfaethlu, Holyhead, LL65 4PB
O R Jones & Sons	Bus and coach company	Coach Depot, Llanfaethlu, Holyhead, LL65 4NW
Teithiau Elfyn Thomas Tours	Tour operator	Coach Depot, Llanfaethlu, Holyhead, LL65 4NW
Condessa Welsh Liqueurs	Production and online retail	Bryn Maethlu, Llanfaethlu, Holyhead, LL65 4NW

Land use

Agricultural land

- 3.3.39 The predominant land use in the study area is agriculture. The land supports a limited range of upland agricultural systems with livestock production (cattle and sheep) as the main farming type.
- 3.3.40 The predominant land class in the study area is Grade 3b (moderate quality non-BMV agricultural land). Figure G3-2c (Application Reference Number: 6.7.48) shows the distribution of ALC classes within the extent of land-take

and shows that the most productive land is Grade 2 (very good quality BMV agricultural land) and that it is located in the centre of section 5.

- 3.3.41 Collectively, there are eight agricultural land interests in the study area which are directly affected by the A5025 Off-line Highway Improvements (as outlined in table G3-10). The baseline data collated by Fisher German [RD5] were used to give an individual sensitivity assessment for each land interest affected by section 5 (refer to figure G3-2c, Application Reference Number: 6.7.48 for land interests). The sensitivity assessments for each land interest are detailed in table G3-10.

Table G3-10 Agricultural sensitivity assessment – Llanfaethlu

Land interest (reference)	Agricultural activity	Overall sensitivity
Plas Newydd (30090)	Cattle and sheep farm. Land plot extending to 32ha. Potential cropping. ALC Grade 3b.	Medium
Penhesgyn (20290)	Cattle and sheep farm. Land plot extending to 50ha. ALC Grade 3b.	Medium
Fadog (20543)	Cattle and sheep farm. Land plot area extending to 28ha. Cropping includes barley. ALC Grade 2, Grade 3b and Grade 5.	Medium
Tan-y-Bryn (20320)	Cattle and sheep farm. Land plot area extending to 1ha. ALC Grade 3b.	Medium
Fadog (20540)	Cattle and sheep farm. Land plot extending to 6ha. Cropping includes barley. ALC Grade 2.	Medium
Rhos ty Mawr (20330)	Cattle and sheep farm. Land plot extending to 15ha. ALC Grade 2, Grade 3a and Grade 3b.	Medium
Land at Llanfaethlu (30040)	Land used for grazing and sporting (organised shoots). Land plot extending to 206ha ALC Grade 5.	Medium
Unknown	Area of land used for grazing extending to 1ha. ALC Grade 3a.	Low

Development land and planning applications

- 3.3.42 There are 11 planning applications and no development land allocations within the study area. A summary of planning applications in the study area is provided in appendix G3-1 (Application Reference Number: 6.7.15). The locations of planning applications in relation to section 5 are shown on figure G3-1c (Application Reference Number: 6.7.48).

Section 7: Cefn Coch

Neighbouring communities and local services

- 3.3.43 The main settlement within the study area includes Llanrhuddlad which is located just on the edge of the study area, south of section 7. It has a population of just under 800 people (at least 61.1% of whom are considered to be Welsh speakers according to ward-level census data). The settlement is situated approximately 20km from the centre of Holyhead - Caergybi which is a 19-minute drive.
- 3.3.44 The majority of residential properties in the area are located within the settlements of Llanrhuddlad and Cefn Coch. In addition, there are several farm steadings located along the existing A5025.
- 3.3.45 There is only one local service within the study area; a place of worship as shown on figure G3-1d (Application Reference Number: 6.7.48).

Public safety

- 3.3.46 Below is an outline of the current baseline in respect to public safety and the occurrence of crime specifically in regard to section 7 of the A5025 Off-line Highway Improvements.
- 3.3.47 According to police statistics [RD3] between January 2016 and December 2016, there were 56 crimes reported in Mechell. The months with the highest number of crime reported were May, June and November 2016 as shown in table G3-11. Violence and sexual offences were the most frequent crimes reported across the year.

Table G3-11 Crimes reported in Mechell [RD3]

Month	Number of crimes	Nature of crimes
January 2016	2	Robbery and violence/sexual offences
February 2016	5	Criminal damage and arson, anti-social behaviour and burglary
March 2016	5	Anti-social behaviour, violence/sexual offences, public order and other theft
April 2016	6	Anti-social behaviour, public order, other crime and other theft

Month	Number of crimes	Nature of crimes
May 2016	7	Criminal damage and arson, possession of weapons, other theft and violence/sexual offences
June 2016	7	Anti-social behaviour and violence/sexual offences
July 2016	3	Violence/sexual offences and other theft
August 2016	2	Anti-social behaviour and theft
September 2016	6	Bicycle theft, criminal damage and arson, vehicle crime and violence/sexual offences
October 2016	4	Burglary and violence/sexual offences
November 2016	7	Violence/sexual offences, anti-social behaviour and other theft
December 2016	2	Violence/sexual offences

- 3.3.48 The total number of crimes reported in 2016 in Mechell, 56, is less than the total number of crimes reported in Valley, 141, and Llanfaethlu, 75 (as shown in table G3-2 and table G3-5). Although this equates to approximately only 40% of the crimes reported in Valley and 75% of those reported in Llanfaethlu, this is primarily due to the more rural setting of Mechell ward.
- 3.3.49 North Wales crime rates per 1,000 population, as outlined in paragraph 3.3.10, are also relevant to providing wider contextualisation for the occurrence of crime with respect to section 7 and so this baseline information will not be repeated here.
- 3.3.50 Table G3-12 shows the trend in the total number of crimes reported between 2012 and 2016. Between 2012 and 2016 there was a 36% drop in the number of crimes. Overall there is no clear trend visible and the number of crimes reported fluctuates between 2012 and 2016.

Table G3-12 Trend data in Mechell 2012–2016 [RD3]

Year	2012	2013	2014	2015	2016
Total number of crimes	87	47	26	58	56

Local businesses

- 3.3.51 There are limited local businesses located within the study area. Table G3-13 below shows the number of businesses found within the study area, and their location.

**Table G3-13 Local businesses within the study area of section 7:
Cefn Coch**

Business	Description	Location
Camel Cabs Taxi Service	Taxi service	Ty mon, Llanrhuddlad, LL65 4HT
Pandy Cottage Bed & Breakfast	Bed & breakfast	Llanfechell, LL68 0SW
Ziska	Travel and transport company	Ty'n yr Odyn, Llanfechell, Amlwch, LL68 0SW

Land use

Agricultural land

- 3.3.52 The predominant land use in the study area is agriculture. The land supports a limited range of extensive agricultural systems with livestock production (cattle and sheep) as the main farming type.
- 3.3.53 The predominant land classes in the study area are Grade 3a (good quality BMV agricultural land) and Grade 3b (moderate quality non-BMV agricultural land). Figure G3-2d (Application Reference Number: 6.7.48) shows the distribution of ALC classes in the extent of land-take which shows that the most productive land is Grade 3a.
- 3.3.54 Collectively, there are four agricultural land interests in the study area which are directly affected by the A5025 Off-line Highway Improvements (as outlined in table G3-14). The baseline data collected during the farm business surveys were used to give an individual sensitivity assessment for each land interest affected by section 7 (refer to figure G3-2d for land interests). The sensitivity assessments for each land interest are detailed in table G3-14.

Table G3-14 Agricultural sensitivity assessment – Cefn Coch

Land interest	Agricultural activity	Overall sensitivity
Bod Hedd (20090)	Cattle farm. Land plots extending to 55ha. ALC Grade 5.	Low
Tyn-y-Felin (20100)	No existing agricultural activities. Land plot extending to 1ha. Currently grassland. ALC Grade 3b.	Low
Penygroes (20020)	Cattle and sheep farm. Land plot extending to 18ha. ALC Grade 3a.	Medium
Cefn Coch (20010)	Dairy farm.	High

Land interest	Agricultural activity	Overall sensitivity
	Land plot extending to 51ha. ALC Grade 3a, Grade 3b and Grade 4.	

Development land and planning applications

- 3.3.55 There are eight planning applications and no development land allocations within the study area. A summary of planning applications in the study area is provided in appendix G3-1 (Application Reference Number: 6.7.15). The locations of planning applications in relation to section 7 are shown on figure G3-1d (Application Reference Number: 6.7.48).

Wylfa Newydd Power Station Access Road Junction

Neighbouring communities and local services

- 3.3.56 The main settlement within the study area includes Tregele which is located north-east of the Wylfa Newydd Power Station Access Road Junction and has a population of approximately 170. At least 61.1% of this population are considered to be Welsh speakers according to ward-level census data. Tregele is a small village located south of the Wylfa Newydd Development Area. The small village does not have any key community services, and relies on Cemaes and other villages along the A5025 to access services. The settlement is situated approximately 25km from the centre of Holyhead - Caergybi which is a 24-minute drive.
- 3.3.57 The majority of residential properties in the area are located within the settlement of Tregele. In addition, there are several farmsteads located along the existing A5025.

Public safety

- 3.3.58 The baseline information for public safety for the Wylfa Newydd Power Station Access Road Junction is covered in paragraphs 3.3.45 to 3.3.49. This is because Mechell ward covers both study areas for section 7 and the Wylfa Newydd Power Station Access Road Junction.

Local businesses

- 3.3.59 There is only one local business, Tregele Service Station, located within the study area. It lies within the settlement of Tregele.

Land use

Agricultural land

- 3.3.60 The predominant land use in the study area is agriculture. The land supports a limited range of extensive agricultural systems with livestock production (cattle and sheep) as the main farming type.

- 3.3.61 The predominant land class in the extent of land-take is Grade 3a (good quality BMV agricultural land) which is illustrated on figure G3-2e (Application Reference Number: 6.7.48).
- 3.3.62 Overall, there is only one agricultural land interest in the study area which is affected by the A5025 Off-line Highway Improvements. The baseline data collected during the farm business surveys were used to give an individual sensitivity assessment for the land interest affected by the Wylfa Newydd Power Station Access Road Junction (refer to figure G3.2e, Application Reference Number: 6.7.48, for land interests). The sensitivity assessment for the land interest is detailed in table G3-15.

Table G3-15 Agricultural sensitivity assessment – Wylfa Newydd Power Station Access Road Junction

Land interest	Agricultural activity	Overall sensitivity
Land at Groes (WO580)	Cattle and sheep farm. Land plot extending to 32ha. ALC Grade 3a and Grade 3b.	Medium

Development land and planning applications

- 3.3.63 There are eight planning applications and no development land allocations within the study area. A summary of planning applications in the study area is provided in appendix G3-1 (Application Reference Number: 6.7.15). The location of development land in relation to the Wylfa Newydd Power Station Access Road Junction is shown on figure G3-1e (Application Reference Number: 6.7.48).

Evolution of the baseline

- 3.3.64 The socio-economic baseline conditions are expected to remain broadly similar as reported in this chapter. The developing baseline has been considered through the review of planning applications within a three-year period as discussed in section 3.3.

3.4 Design basis and activities

- 3.4.1 This section sets out the design basis for the assessment of effects. It sets out where any assumptions have been made to enable the assessment to be carried out at this stage in the evolution of the design. This section also identifies the embedded and good practice mitigation that will be adopted to reduce adverse effects as inherent design features or by implementation of standard industry good working practice.

As described in chapter G1 (proposed development) (Application Reference Number: 6.7.1), the application for development consent for the A5025 Off-line Highway Improvements is based on the designs shown on the Works Plans (Application Reference Number: 2.3) within the limits of deviation specified. This chapter has assessed a worst case scenario from a socio-economics perspective, taking into account the flexibility afforded by the

Works Plans (Application Reference Number: 2.3) and limits of deviation described in chapter G1 (Application Reference Number: 6.7.1).

Construction

Basis of assessment and assumptions

- 3.4.2 The land use assessment assumes that all land-take is within the Order Limits, throughout construction, for the A5025 Off-line Highway Improvements.

Embedded mitigation

- 3.4.3 Embedded mitigation measures have been incorporated into the design of the A5025 Off-line Highway Improvements (see volume 3 of the Design and Access Statement (Associated Developments and Off-Site Power Station Facilities) (Application Reference Number 8.2.3)) and considered in the assessment of potential socio-economic effects. Those mitigation measures specific to agricultural land interests include the replacement of boundary features (e.g. fences, walls and hedges) with appropriate materials to provide a secure boundary which require temporary or permanent alteration during construction.

Good practice mitigation

- 3.4.4 Good practice mitigation during construction of the A5025 Off-line Highway Improvements is outlined in table G3-16.

Table G3-16 Good practice mitigation – construction

Description	Mitigation purpose/objective
The Wylfa Newydd Code of Construction Practice (CoCP) (Application Reference Number: 8.6) and site specific A5025 Off-line Highway Improvements sub-CoCP (Application Reference Number: 8.12) set out the requirements of work ensuring compliance with legislation and the effective planning, management and control of construction activities with the aim of reducing and avoiding adverse effects on the local community and the environment. The parameters of requirements in terms of general site management, working hours, site layouts, appropriate lighting and security arrangements, including security fencing, amongst others are outlined in both documents. The A5025 Off-line Highway Improvements will be subject to both the Wylfa Newydd CoCP (Application Reference Number: 8.6) and the A5025 Off-line Highways Improvements sub-CoCP (Application Reference Number: 8.12) which will outline management strategies for air quality, noise and vibration, traffic and transport, public access, etc.	To reduce potential environmental effects of construction activities.

Description	Mitigation purpose/objective
Chapter 6 of the Wylfa Newydd CoCP outlines that access to/from residential property, local businesses and local services and agricultural interests will be maintained throughout the construction period by means of signed diversions, where necessary. The estimated duration and location of these diversions will be communicated to affected parties, as required, before they are put in place.	To maintain access to/from residential property, local businesses and local services and agricultural interests.
Chapter 3 of the A5025 Off-line Highways Improvements sub-CoCP (Application Reference Number: 8.12) outlines the consultation strategy, which includes engagement with affected landowners and occupiers to discuss the location and timing of planned construction works to reduce disturbance, where practicable, taking into account the overall construction programme.	To reduce disturbance on affected landowners.
Notice of intention to commence construction work will be provided to owners and occupiers of agricultural land adjacent to the A5025 Off-line Highway Improvements before works commence. This protocol is outlined in chapter 3 of the A5025 Off-line Highways Improvements sub-CoCP (Application Reference Number: 8.12)	To ensure owners and occupiers of agricultural land adjacent to the A5025 Off-line Highway Improvements are informed of the intention to commence construction work prior to works commencing.
In line with section 10.2 of the A5025 Off-line Highways Improvements sub-CoCP (Application Reference Number: 8.12), water supplies for livestock will be identified pre-construction and, where supplies are lost or access is compromised by any construction works, temporary and/or permanent alternative supplies will be provided as agreed with the landowner/occupier.	To reduce disruption to landowners/occupiers
In respect to the safety fencing identified in chapter 4 of the Wylfa Newydd CoCP (Application Reference Number: 8.6), where construction will take place adjacent to land containing livestock, fencing of working areas will be to a standard adequate for excluding any livestock kept on adjoining land.	For the health and safety of the public and animals and to avoid trespassing.

Description	Mitigation purpose/objective
<p>As outlined in section 9 of the Wylfa Newydd CoCP (Application Reference Number: 8.6), guidance for the Sustainable Use of Soils on Construction Sites and Good Practice Guide for Handling Soils will be followed. In addition, a Biosecurity Risk Assessment and Method Statement would detail how contaminated areas, (including soil-borne pests and diseases, animal and crop diseases, tree pests and diseases, and invasive species) would be demarcated, and how the disposal of contaminated materials will be appropriately managed throughout the works. This would include details of how the transfer of viable propagules of invasive non-native species by people or vehicles would be prevented.</p>	<p>To avoid the spreading of soil-borne pests and diseases, animal and crop diseases, tree pests and diseases, and invasive species.</p>
<p>Further to the drainage and flood risk good practice measures included in section 10 of the Wylfa Newydd CoCP (Application Reference Number: 8.6), specific measures to deal with the potential effects on agricultural land will be required.</p> <p>As outlined in section 10.3 of the A5025 Off-line Highways Improvements sub-CoCP (Application Reference Number: 8.12), pre-construction field drainage surveys will be undertaken to reduce the likelihood of damage or disturbance to field and forestry drainage systems during construction.</p> <p>Where required, the integrity of the drainage system will be secured in advance of construction.</p> <p>Repairing and reinstatement of drains affected by construction will be agreed with the landowner/occupier to ensure that land capability is maintained and the risk of flooding is not exacerbated.</p>	<p>To reduce the likelihood of damage or disturbance to field drainage systems during construction.</p>
<p>In line with section 11.4 of the Wylfa Newydd CoCP (Application Reference Number: 8.6), on completion of works, any land required temporarily for construction works will be returned to its original agricultural use.</p>	<p>To ensure appropriate restoration of land following completion of the A5025 Off-line Highway Improvements.</p>
<p>Land that is declared surplus following completion of construction of the proposed scheme (including redundant road pavement and/or access tracks) will be offered back to former owners or their successors in accordance with the Criche Down Rules [RD9].</p>	<p>Ensuring the return of any surplus land to owners or their successors in line with the Criche Down Rules [RD9] to minimise land-take.</p>

Description	Mitigation purpose/objective
This protocol is outlined in section 11.3 of the A5025 Off-line Highways Improvements sub-CoCP (Application Reference Number: 8.12).	
Replacement of existing roadside signage on the A5025 Off-line Highway Improvements for certain businesses whose access has changed and whose business is particularly dependent upon vehicular movements from the A5025.	To reduce disruption to businesses where access arrangements have changed as a result of the A5025 Off-line Highway Improvements.

Operation

Basis of assessment and assumptions

- 3.4.5 The land use assessment assumes that the A5025 Off-line Highway Improvements occupy the entire extent of land-take within the Order Limits, with no return to agriculture, assuming a worst case scenario.

Embedded mitigation

- 3.4.6 Embedded mitigation measures have been incorporated into the design of the A5025 Off-line Highway Improvements and considered in the assessment of potential socio-economic effects. Those mitigation measures specific to agricultural land interests outlined in appendix G3-2 (Agricultural Impact Report) (Application Reference Number: 6.7.16) are described within the Design and Access Statement, volume 3 (Application Reference Number: 8.2.3) for the A5025 Off-line Highway Improvements and a summary is provided below:
- Development of road alignments that work with existing land uses and agricultural field patterns to reduce field severance, where practicable.
 - Incorporating measures in the design such as agricultural underpasses, bridges, trackways, private means of access and cattle handling facilities to maintain access for farm vehicles and animals.
 - Maintaining existing access for residential properties, local businesses and local services where practicable, and incorporating new points of access to agricultural landholdings from the bypasses and bend improvements.
 - Providing new means of access for residential properties, local businesses and local services where necessary through the modification of roads and junctions, and the re-use of existing sections of carriageway.
 - Reinstatement of field boundaries through the use of fencing and hedgerows and incorporating redundant or commercially unviable parcels of land into the design.

Good practice mitigation

- 3.4.7 There is no good practice mitigation outlined for the operational phase of the A5025 Off-line Highway Improvement as the operational phase will be in effect, an active roadway.

3.5 Assessment of effects

- 3.5.1 This section presents the findings of the assessment of effects associated with the construction and operation of the A5025 Off-line Highway Improvements.
- 3.5.2 Construction and operation effects have been assessed together as effects on socio-economics are expected to be similar during both construction and operation phases. All potential effects are adverse unless otherwise stated.
- 3.5.3 In respect to potential effects on Welsh language and culture, it should be noted (and highlighted in paragraph F4.6 of the WLIA, Application Reference Number: 8.21) that the A5025 Off-line Highway Improvements themselves, are not expected to lead to any direct changes in the resident population of the study areas as they relate to the construction of new sections of road infrastructure, such as bypasses and road realignment works in five locations along the existing A5025 between Valley and the Wylfa Newydd Development Area. Therefore, no change to the balance of Welsh/non-Welsh speakers would be expected to occur. Potential effects as a result of the required workforce of the A5025 Off-line Highway Improvements are considered under project-wide effects within volume B of the WLIA (Application Reference Number: 8.21).

Section 1: Valley

Neighbouring communities and local services

Land-take

- 3.5.4 There are no residential properties, community properties or community land expected to be directly affected as a result of land-take from section 1.

Vehicle access

- 3.5.5 There are two residential properties located on the existing A5025 which would be situated on a stopped-up road. Residents would be required to travel an additional 0.4km to access the improved A5025, and this is assessed as a negligible effect. The additional journey distance is shown on figure G3-3a (Application Reference Number: 6.7.48).

Community severance

- 3.5.6 Journeys made by people to and from facilities within Valley via the existing A5025 would become slightly longer (approximately 300m), as a short section of the existing A5025 north-east of the settlement would be stopped up for road users only. This would require people to join the off-line section and negotiate a roundabout. As one hindrance would need to be negotiated, this new severance is assessed as a minor effect.

Public safety

- 3.5.7 Due to the installation of construction site wire mesh fences (no more than 2m high) surrounding the entire construction site working area no significant direct effects on public safety within the study area have been identified. This is further highlighted in table G3-16 as good practice mitigation to reduce potential environmental effects of construction activities.

Local businesses

Land-take

- 3.5.8 There are two local businesses that would be affected by section 1 of the A5025 Off-line Highway Improvements. Due to the construction of a roundabout and replacement of an existing access, an industrial freight yard located on the edge of Valley would be subject to 0.04ha of land-take. As a result of this direct land-take, a minor effect is assessed.
- 3.5.9 An access track owned by Welsh Water would also be subject to permanent land-take (0.01ha). As the design of the A5025 Off-line Highway Improvements are not expected to interact with this parcel of land, only a minor effect is assessed.

Vehicle access

- 3.5.10 Gwalia Service Station is expected to experience a change in vehicle access similar to the two residential properties located on the existing A5025. The service station would be located on a stopped-up road; therefore, customers and employees would be required to travel an additional 0.4km to access the improved A5025 (refer to figure G3-3a, Application Reference Number: 6.7.48). This is assessed as a negligible effect.

Likely future commercial business viability

- 3.5.11 Section 1 would take existing traffic from the A5025 and away from the centre of the community of Valley which would likely affect Gwalia Service Station, which is considered to have reliance on passing trade. Gwalia Service Station is also located on the existing A5025 and this section of the road would be stopped up. The service station being located on a cross road with the A5 has an additional access onto/from the A5 and the Off-line Highway Improvements would have no effect on this access. As a result of the minor change in vehicle access, there are no significant effects expected on likely future business viability.

Land use

Agricultural land

- 3.5.12 There are four agricultural land interests affected by land-take (totalling 10.93ha) as a result of section 1. The potential effects for the agricultural land interests are detailed within appendix G3-2 (Application Reference Number: 6.7.16).
- 3.5.13 There are potential significant effects on one agricultural land interest. These impacts are described in table G3-17, and generally relate to loss of land, loss

of access, loss of field boundaries (including fences, hedges and walls) and disruption of existing field drainage systems.

Table G3-17 Description of significant effects – Valley

Agricultural land interest	Description of potential effect
Ynys Wen (10120, 10213 and 20603)	<p>Loss of 8.57ha of which is ALC Grade 4.</p> <p>Land lost equates to 43% of total land plot area.</p> <p>Three fields affected. Severance of one field.</p> <p>Loss of boundary features and disruption to field drainage system.</p> <p>Significance assessed as Moderate/major.</p>

- 3.5.14 The impacts on three agricultural interests have been assessed as being not significant and the businesses are assumed to remain viable.
- 3.5.15 One farm business (Ynys Wen), assessed as being subject to adverse residual impacts of moderate or higher significance, was further reviewed to determine whether or not the business would remain viable. The effects on Ynys Wen are predicted to result in a significant adverse impact on likely future farm business viability due primarily to land-take and consequent operational impacts on the business. Land-take at Ynys Wen would equate to 43% of the land plot area. The impacts of the A5025 Off-line Highway Improvements on the farming business would likely be such that the business owner may have to reduce activities to a point where the business becomes commercially unviable, it needs to relocate, or the owner chooses to cease trading.
- 3.5.16 There are two additional land interests that would potentially experience direct land-take as a result of the A5025 Off-line Highway Improvements (totalling 3m²). Due to the limited land-take these land interests have been scoped out of the assessment.

Development land and planning applications

- 3.5.17 There are no development land allocations or planning applications, as outlined in appendix G3-1 (Application Reference Number: 6.7.15), expected to be directly or indirectly affected as a result of section 1.

Section 3: Llanfachraeth

Neighbouring communities and local services

Land-take

- 3.5.18 There are no residential properties, community properties or community land expected to be directly affected as a result of land-take from section 3.

Vehicle access

- 3.5.19 There are no changes in vehicle access expected as a result of section 3.

Community severance

- 3.5.20 The A5025 Off-line Highway Improvements are expected to benefit the community of Llanfachraeth due to the transfer of traffic from the existing A5025 and onto the bypass, and bend improvements. As the existing traffic levels are expected to reduce by more than 60%, this relief from existing severance is assessed as a major (beneficial) effect.
- 3.5.21 Journeys made by people from the east of Llanfachraeth, for example within the dispersed community of Llanfigael, currently use a minor road which connects to the village centre. The A5025 Off-line Highway Improvements would modify this minor road through the introduction of an overbridge at chainage 1080 (ch1080), to take the road over the main bypass. As one hindrance (a road crossing) would need to be negotiated, this new severance is assessed as a minor effect.

Public safety

- 3.5.22 Due to the installation of construction site wire mesh fences (no more than 2m high) surrounding the entire construction site working area, no significant direct effects on public safety within the study area have been identified. This is further highlighted in table G3-16 as good practice mitigation to reduce potential environmental effects of construction activities.

Local businesses

Land-take

- 3.5.23 There are no local businesses directly affected as a result of land-take from section 3.

Vehicle access

- 3.5.24 There are no changes in vehicle access to local businesses expected as a result of section 3.

Likely future commercial business viability

- 3.5.25 Section 3 would take existing traffic away from the centre of Llanfachraeth along a new alignment. This would likely affect the local businesses within the centre including Llanfachraeth Post Office, Holland Hotel and Wynnstay Country Store. Although a proportion of passing trade would be lost, no significant effect on likely future business viability is expected as the local community of Llanfachraeth, and surrounding settlements, would still be reliant on the services of the business.

Land use

Agricultural land

- 3.5.26 There are seven agricultural land interests affected by land-take (totalling 18.92ha) as a result of section 3. The potential effects for the agricultural land interests are detailed within appendix G3-2 (Application Reference Number: 6.7.16).

- 3.5.27 There are potential significant effects on three agricultural land interests. These effects are described in table G3-18, and generally relate to loss of land, loss of access, loss of field boundaries (including fences, hedges and walls) and disruption of existing field drainage systems.

Table G3-18 Description of significant effects – Llanfachraeth

Agricultural land interest	Description of potential effect
Erw Goch (10010)	<p>Loss of 7.34ha (0.68ha is ALC Grade 2, 2.66ha is ALC Grade 3a, 0.57ha is ALC Grade 3b, 2.43ha is ALC Grade 4 and 0.99ha is ALC Grade 5).</p> <p>Land lost equates to 15% of total land plot area.</p> <p>Six fields and one parcel of scrubland affected.</p> <p>Severance of three fields. High degree of severance.</p> <p>Creation of severed area (approximately 0.01ha) which would not be practical for agricultural use.</p> <p>Loss of boundary features and disruption to field drainage system.</p> <p>Significance assessed as Moderate/major.</p>
Bedo (10020)	<p>Loss of 3.85ha (0.03ha is ALC Grade 2, 2.92ha is ALC Grade 3a, 0.41ha is ALC Grade 3b and 0.49a is ALC Grade 5).</p> <p>Land lost equates to 25% of total land plot area.</p> <p>Three fields and one parcel of scrubland affected.</p> <p>Severance of three fields.</p> <p>Access to western areas of severed fields not provided.</p> <p>Loss of boundary features and disruption to field drainage system.</p> <p>Significance assessed as Moderate/major.</p>
Pen-yr-Orsedd (10050)	<p>Loss of 6.76ha (1.62ha is ALC Grade 2, 3.69ha is ALC Grade 3a, 0.31ha is ALC Grade 3b and 1.14 is ALC Grade 4).</p> <p>Land lost equates to 31% of total land plot area.</p> <p>Seven fields affected and one field lost. Severance of two fields.</p> <p>Loss of boundary features and disruption to field drainage system.</p> <p>Significance assessed as Major.</p>

- 3.5.28 Impacts on four agricultural interests have been assessed as being not significant, and businesses are assumed to remain viable. Three farm businesses (Erw Goch, Bedo and Pen-yr-Orsedd) with adverse residual impacts of moderate or higher significance were further reviewed to determine whether or not the businesses would remain viable.
- 3.5.29 Effects on Bedo are assessed as resulting in significant adverse impacts on likely future farm business viability due primarily to land-take, severance and

consequent operational impacts on the business. Land-take at Bedo would equate to 25% of the land plot area. The impacts of the A5025 Off-line Highway Improvements on the farming business would likely be such that the business owner may have to reduce activities to a point where the business becomes commercially unviable, it needs to relocate, or the owner chooses to cease trading.

- 3.5.30 There are two additional land interests that would potentially experience direct land-take as a result of the A5025 Off-line Highway Improvements (totalling less than 1m²). Due to the limited land-take these have been scoped out of the assessment.

Development land and planning applications

- 3.5.31 There are no development land allocations or planning applications, as outlined in appendix G3-1 (Application Reference Number: 6.7.15), expected to be directly or indirectly affected as a result of section 3.

Section 5: Llanfaethlu

Neighbouring communities and local services

Land-take

- 3.5.32 There are no residential properties, community properties or community land expected to be directly affected as a result of land-take from section 5.

Vehicle access

- 3.5.33 There is a group of residential properties (three dwellings) and one place of worship (Soar Addoldy Y Bedyddwyr) located on the existing A5025 which would be situated on a stopped-up road (at the southern extent of the A5025 Off-line Highway Improvements). Residents would be required to travel approximately an additional 0.1km to access the improved A5025, assessed as a negligible effect. The additional journey distance is shown on figure G3-3b (Application Reference Number: 6.7.48).
- 3.5.34 Residential and community properties located within Llanfaethlu currently have direct access to the existing A5025 and are able to travel north towards Cemaes. This northern section of the existing A5025 would be stopped up resulting in an additional travel distance of approximately 0.3km to travel north via the improved A5025. The additional journey distance is assessed as a negligible effect and is shown on figure G3-3b (Application Reference Number: 6.7.48).

Community severance

- 3.5.35 Journeys made by people from the east and north of Llanfaethlu currently use the A5025 and minor roads, which would be affected by the A5025 Off-line Highway Improvements. The A5025 Off-line Highway Improvements would result in sections of the existing A5025 becoming stopped up, and two new junctions (ch160 and ch820) would be formed to maintain connections through the settlement. People travelling from the north from wider communities, such as Rhydwyn, would have to join the improved A5025 and then leave the road

via new junctions, which would cause some inconvenience to their journeys. Similar alterations to journeys would occur for people travelling from the east of Llanfaethlu. Such effects would introduce an additional hindrance and as such would be assessed as a minor effect.

Public safety

- 3.5.36 Due to the installation of construction site wire mesh fences (no more than 2m high) surrounding the entire construction site working area, no significant direct effects on public safety within the study area have been identified. This is further highlighted in table G3-16 as good practice mitigation to reduce potential environmental effects of construction activities.

Local businesses

Land-take

- 3.5.37 There are no local businesses directly affected as a result of land-take from section 5.

Vehicle access

- 3.5.38 The Black Lion Inn is expected to experience a change in vehicle access similar to those outlined in paragraph 3.5.33. The Black Lion Inn would be located on a stopped-up road; therefore, customers and employees would be required to travel an additional 0.1km to access the improved A5025. This is assessed as a negligible effect which is shown on figure G3-3b (Application Reference Number: 6.7.48).
- 3.5.39 Local businesses located within the centre of Llanfaethlu (Coffee House Shop and Llanfaethlu Post Office) are expected to experience a change in vehicle access similar to those outlined in paragraph 3.5.34. The local businesses would be located on a stopped-up road; therefore, customers and employees would be required to travel an additional 0.3km to access the improved A5025. This is assessed as a negligible effect which is shown on figure G3-3b (Application Reference Number: 6.7.48).

Likely future commercial business viability

- 3.5.40 Section 5 would take existing traffic further away from the settlement of Llanfaethlu along a new alignment. This would likely affect the local businesses within the centre including Llanfaethlu Post Office and Coffee House Shop and the Black Lion Inn, located south of section 5. Although a proportion of passing trade would be lost, no significant effect on likely future business viability is expected. It is expected that the local community of Llanfaethlu, and surrounding settlements, would still be reliant on the services of the businesses.

Land use

Agricultural land

- 3.5.41 There are eight agricultural land interests affected by land-take (totalling 9.86ha) as a result of section 5. The potential effects for the agricultural land interests are detailed within appendix G3-2 (Application Reference Number: 6.7.16).
- 3.5.42 There are significant potential effects on three agricultural land interests. These effects are described in table G3-19, and generally relate to loss of land, loss of access, loss of field boundaries (including fences, hedges and walls) and disruption of existing field drainage systems.

Table G3-19 Description of significant effects – Llanfaethlu

Agricultural land interest	Description of potential effect
Fadog (20543)	<p>Loss of 6.47ha (4.44 is ALC Grade 3a, 1.71ha is ALC Grade 3b, 0.03ha is ALC Grade 4 and 0.29ha is ALC Grade 5). Land lost equates to 23% of total land plot area. Five fields affected. One field and one parcel of scrubland lost. Severance of two fields. Loss of boundary features and disruption to field drainage system. Significance assessed as Moderate/major.</p>
Rhos ty Mawr (20330)	<p>Loss of 2.22ha (0.79ha is ALC Grade 2, 1.01ha is ALC Grade 3a and 0.42ha is ALC Grade 3b). Land lost equates to 15% of total land plot area. Five fields affected. Severance of two fields. High degree of severance. Creation of two severed areas (approximately 0.04ha) which would not be practical for agricultural use. Loss of boundary features and disruption to field drainage system. Significance assessed as Moderate/major.</p>
Unknown	<p>Loss of 1.02ha which is ALC Grade 3b. Land lost equates to 77% of total land plot area. One field lost. Loss of boundary features and disruption to field drainage system. Significance assessed as Moderate.</p>

- 3.5.43 Those agricultural interests assessed as not being subject to significant impacts are assumed to remain viable. Any farm businesses with adverse residual impacts of moderate or higher significance were further reviewed to determine whether or not the businesses would remain viable. The A5025 Off-

line Highway Improvements in section 5 are not anticipated to effect likely future farm business viability.

- 3.5.44 There are four additional land interests that would potentially experience direct land-take as a result of the A5025 Off-line Highway Improvements (totalling 33m²). Due to the limited land-take these have been scoped out of the assessment.

Development land and planning applications

- 3.5.45 There is one planning application, PA40 (reference 29C156) (as outlined in appendix G3-1, Application Reference Number: 6.7.15), expected to be directly affected as a result of section 5. Land-take of 0.01ha is expected from the proposed access of the planning application (the extension of the existing water works). The A5025 Off-line Highway Improvements are not expected to impact on the overall development capacity of the site therefore no significant impact is expected.

Section 7: Cefn Coch

Neighbouring communities and local services

Land-take

- 3.5.46 There are no residential properties, community properties or community land expected to be directly affected as a result of land-take from section 7.

Vehicle access

- 3.5.47 The existing crossroads in the study area would be stopped up as a result of the A5025 Off-line Highway Improvements. To replace this, a simple T-junction (ch593) is proposed. As a result, residents located in the wider communities of Llanfechell and Mechell would be required to negotiate an additional T-junction (ch593) to access the improved A5025. This change in access is not expected to change the journey distance for northbound or southbound journeys.

Community severance

- 3.5.48 Journeys made by people east to west and west to east within the wider communities using the existing crossroads would become slightly longer as the junction would be stopped up and replaced with a simple T-junction. This would require people to use the existing A5025 and join the bypass at ch137 (to the south) or ch1143 (to the north). As one hindrance would need to be negotiated, this new severance is assessed as a minor effect.

Public safety

- 3.5.49 Due to the installation of construction site wire mesh fences (no more than 2m high) surrounding the entire construction site working area, no significant direct effects on public safety within the study area have been identified. This is further highlighted in table G3-16 as good practice mitigation to reduce potential environmental effects of construction activities.

Local businesses

Land-take

- 3.5.50 There are no local businesses directly affected as a result of land-take from section 7.

Vehicle access

- 3.5.51 There are no changes in vehicle access to local businesses expected as a result of section 7.

Likely future commercial business viability

- 3.5.52 There are no effects expected on likely future commercial business viability in section 7.

Land use

Agricultural land

- 3.5.53 There are four agricultural land interests affected by land-take (totalling 9.00ha) as a result of section 7. The potential effects for the agricultural land interests are detailed within appendix G3-2 (Application Reference Number: 6.7.16).
- 3.5.54 There are significant potential effects on three agricultural land interests. These impacts are described in table G3-20, and generally relate to loss of land, loss of access, loss of field boundaries (including fences, hedges and walls) and disruption of existing field drainage systems.

Table G3-20 Description of significant effects – Cefn Coch

Agricultural land interest	Description of potential effect
Tyn-y-Felin (20100)	<p>Loss of 0.88ha (0.69ha is ALC Grade 3b and 0.18ha is ALC Grade 4).</p> <p>Land lost equates to 99% of total land plot area.</p> <p>One field lost.</p> <p>Loss of boundary features and disruption to field drainage system.</p> <p>Significance assessed as Moderate.</p>
Penygroes (20020)	<p>Loss of 1.36ha (1.35ha is ALC Grade 3a and 0.01ha is ALC Grade 4).</p> <p>Land lost equates to 11% of total land plot area.</p> <p>Two fields affected.</p> <p>Longer route to access severed land, high degree of severance.</p> <p>Loss of boundary features and disruption to field drainage system.</p> <p>Significance assessed as Moderate/major.</p>

Agricultural land interest	Description of potential effect
Cefn Coch (20010)	<p>Loss of 4.37ha (1.17ha is ALC Grade 3a, 1.68ha is ALC Grade 3b and 1.52ha is ALC Grade 4).</p> <p>Land lost equates to 8% of total land plot area.</p> <p>Four fields and one parcel of scrubland affected.</p> <p>High degree of severance.</p> <p>Loss of boundary features and disruption to field drainage system.</p> <p>Significance assessed as Moderate/major.</p>

- 3.5.55 The impacts on one agricultural interest has been assessed as being not significant, and the businesses are assumed to remain viable. Three farm businesses (Tyn-y-Felin, Penygroes and Cefn Coch) with adverse residual impacts of moderate or higher significance were further reviewed to determine whether or not the businesses would remain viable.
- 3.5.56 Tyn-y-Felin, is assessed as being subject to a significant adverse impact, with implications for likely future farm business viability, due to the entire loss of the farmed land plot area and consequent operational impacts on the business. The impacts of the proposed scheme on the farming business would likely be such that the business may need to relocate, or the owner chooses to cease trading.
- 3.5.57 There are five additional land interests that would potentially experience direct land-take as a result of the A5025 Off-line Highway Improvements (with an area totalling 51m²). Due to the limited land-take these have been scoped out of the assessment.

Development land and planning applications

- 3.5.58 There are no development land allocations or planning applications, as outlined in appendix G3-1 (Application Reference Number: 6.7.15), expected to be directly or indirectly affected as a result of section 7.

Wylfa Newydd Power Station Access Road Junction

Neighbouring communities and local services

Land-take

- 3.5.59 There are no residential properties, community properties or community land expected to be directly affected as a result of land-take for the Wylfa Newydd Power Station Access Road Junction.

Vehicle access

- 3.5.60 There are no changes in vehicle access to residential properties, community properties or community land expected as a result of the Wylfa Newydd Power Station Access Road Junction.

Community severance

- 3.5.61 There is no community severance expected as a result of the Wylfa Newydd Power Station Access Road Junction.

Public safety

- 3.5.62 Due to the installation of construction site wire mesh fences surrounding the entire construction site working area, no significant direct effects on public safety within the study area have been identified.

Local businesses

Land-take

- 3.5.63 There are no local businesses directly affected as a result of land-take from the Wylfa Newydd Power Station Access Road Junction.

Vehicle access

- 3.5.64 There are no changes in vehicle access to local businesses expected as a result of the Wylfa Newydd Power Station Access Road Junction.

Likely future commercial business viability

- 3.5.65 There are no effects expected on likely future commercial business viability in the study area of the Wylfa Newydd Power Station Access Road Junction.

Land use

Agricultural land

- 3.5.66 There is one agricultural land interest affected by land-take for the Wylfa Newydd Power Station Access Road Junction, with a total area of 2.16ha potentially affected. The potential effects for the agricultural land interests are detailed within appendix G3-2 (Application Reference Number: 6.7.16).
- 3.5.67 There are significant potential effects on one agricultural land interest. These are described in table G3-21, and generally relate to loss of land, loss of access, loss of field boundaries (including fences, hedges and walls) and disruption of existing field drainage systems.

Table G3-21 Description of significant effects – Wylfa Newydd Power Station Access Road Junction

Agricultural land interest	Description of potential effect
Land at Groes (WO580)	<p>Loss of 2.16ha (2.03ha is ALC Grade 3b and 0.13ha is ALC Grade 4).</p> <p>Land lost equates to 7% of total land plot area.</p> <p>Two fields affected.</p> <p>High risk of change in land use.</p> <p>Loss of boundary features and disruption to field drainage system.</p> <p>Significance assessed as Moderate.</p>

- 3.5.68 Those agricultural interests assessed as not being subject to significant impacts were assumed to remain viable. Any farm businesses with adverse residual impacts of moderate or higher significance were further reviewed to determine whether or not the businesses would remain viable. The A5025 Off-line Highway Improvements in this section are not anticipated to have an effect on future farm business viability.
- 3.5.69 There are four additional land interests that would potentially experience direct land-take as a result of the A5025 Off-line Highway Improvements (with an area totalling 52m² potentially affected). Due to the limited land-take these have been scoped out of the assessment.

Development land and planning applications

- 3.5.70 There are no development land allocations or planning applications, as outlined in appendix G3-1 (Application Reference Number: 6.7.15), expected to be directly or indirectly affected as a result of the Wylfa Newydd Power Station Access Road Junction.

3.6 Additional mitigation

- 3.6.1 In accordance with chapter B1 (Introduction to the assessment process) (Application Reference Number: 6.2.1), embedded and good practice mitigation measures relevant to socio-economics were taken into account when determining the 'pre-mitigation' significance of effects. These are detailed in the design basis and activities section of this chapter.
- 3.6.2 There are no additional mitigation measures to be implemented to address significant effects identified in the assessment presented above. Significant residual effects are only present within the land use assessment arising from permanent land-take and field severance of farms. As a result of the A5025 Off-line Highway Improvements, these effects are permanent and cannot be mitigated further.

3.7 Residual effects

- 3.7.1 This section describes the residual effects having taken into account the embedded and good practice mitigation described above. A summary of the residual effects and their significance for socio-economics is provided in table G3-22.

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Table G3-22 Summary of significant residual effects

Receptor (or group of receptors)	Value of receptor(s)	Description of potential effect	Nature of effect	Potential magnitude of change	Potential significance of effect	Additional mitigation	Post-mitigation magnitude of change	Significance of residual effect
Section 1 – Valley								
Ynys Wen (10120, 10213 and 20603)	Low	Loss of 43% of total land plot area. Three fields affected. Severance of one field.	Land-take and field severance	High	Moderate/major	n/a	High	Moderate/major
Ynys Wen (10120, 10213 and 20603)	n/a	Potential reduction in agricultural activities. Business becomes commercially unviable, it requires to relocate, or it chooses to cease trading.	Farm business viability	n/a	Adverse	n/a	n/a	Adverse

Receptor (or group of receptors)	Value of receptor(s)	Description of potential effect	Nature of effect	Potential magnitude of change	Potential significance of effect	Additional mitigation	Post-mitigation magnitude of change	Significance of residual effect
Section 3 – Llanfachraeth								
Local community – Llanfachraeth	n/a	Existing traffic levels within Llanfachraeth would be reduced by more than 60%.	Relief of existing severance	n/a	Major (beneficial)	n/a	n/a	Major (beneficial)
Erw Goch (10010)	Medium	Loss of 15% of total land plot area. Six fields and one parcel of scrubland affected. Severance of three fields.	Land-take and field severance	High	Moderate/major	n/a	High	Moderate/major
Bedo (10020)	Medium	Loss of 25% of total land plot area. Three fields and one parcel of scrubland affected.	Land-take and field severance	High	Moderate/major	n/a	High	Moderate/major

Receptor (or group of receptors)	Value of receptor(s)	Description of potential effect	Nature of effect	Potential magnitude of change	Potential significance of effect	Additional mitigation	Post-mitigation magnitude of change	Significance of residual effect
		Severance of three fields.						
Pen-yr-Orsedd (10050)	High	Loss of 31% of total land plot area. Seven fields affected and one field lost. Severance of two fields.	Land-take and field severance	High	Major	n/a	High	Major
Bedo (10020)	n/a	Potential reduction in agricultural activities. Business becomes commercially unviable, it requires to relocate, or it chooses to cease trading.	Farm business viability	n/a	Adverse	n/a	n/a	Adverse

Receptor (or group of receptors)	Value of receptor(s)	Description of potential effect	Nature of effect	Potential magnitude of change	Potential significance of effect	Additional mitigation	Post-mitigation magnitude of change	Significance of residual effect
Section 5 – Llanfaethlu								
Fadog (20543)	Medium	Loss of 23% of total land plot area. Five fields affected. One field and one parcel of scrubland lost. Severance of two fields.	Land-take and field severance	High	Moderate/major	n/a	High	Moderate/major
Rhos ty Mawr (20330)	Medium	Loss of 15% of total land plot area. Five fields affected. Severance of two fields.	Land-take and field severance	High	Moderate/major	n/a	High	Moderate/major
Unknown	Low	Loss of 77% of total land plot area. One field lost.	Land-take	High	Moderate	n/a	High	Moderate

Receptor (or group of receptors)	Value of receptor(s)	Description of potential effect	Nature of effect	Potential magnitude of change	Potential significance of effect	Additional mitigation	Post-mitigation magnitude of change	Significance of residual effect
Section 7 – Cefn Coch								
Tyn-y-Felin (20100)	Low	Loss of 99% of total land plot area.	Land-take	High	Moderate	n/a	High	Moderate
Penygroes (20020)	Medium	Loss of 11% of total land plot area. Two fields affected.	Land-take	High	Moderate/major	n/a	High	Moderate/major
Cefn Coch (20010)	High	Loss of 8% of total land plot area. Four fields and one parcel of scrubland affected.	Land-take	Medium	Moderate/major	n/a	Medium	Moderate/major
Tyn-y-Felin (20100)	n/a	Potential reduction in agricultural activities. Business may require to relocate or it chooses to	Farm business viability	n/a	Adverse	n/a	n/a	Adverse

Receptor (or group of receptors)	Value of receptor(s)	Description of potential effect	Nature of effect	Potential magnitude of change	Potential significance of effect	Additional mitigation	Post-mitigation magnitude of change	Significance of residual effect
		cease trading.						
Wylfa Newydd Power Station Access Road Junction								
Land at Groes (WO580)	Medium	Loss of 7% of total land plot area. Two fields affected.	Land-take	Medium	Moderate	n/a	Medium	Moderate

3.8 References

Table G3-24 Schedule of references

ID	Reference
RD1	Home Office. 2015. <i>Valley Crime Map</i> . [Online]. [Accessed: 24 April 2017]. Available from: https://www.police.uk/north-wales/YMW09/ .
RD2	Home Office. 2015. <i>Llanfaethlu Crime Map</i> . [Online]. [Accessed: 24 April 2017]. Available from: https://www.police.uk/north-wales/YMW11/ .
RD3	Home Office. 2015. <i>Mechell Crime Map</i> . [Online]. [Accessed: 24 April 2017]. Available from: https://www.police.uk/north-wales/YMW12/ .
RD4	Office for National Statistics. 2016. [Online]. [Accessed: 21 June 2017]. Available from: https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice
RD5	Fisher German, Rural Estate Agents & Chartered Surveyors. 2016. Farm Business Surveys.
RD6	Isle of Anglesey County Council. 2017. <i>View list of planning applications</i> . [Online]. [Accessed: 16 May 2017]. Available from: http://www.anglesey.gov.uk/planning-and-waste/planning-control/view-list-of-current-and-previous-planning-applications/ .
RD7	Isle of Anglesey County Council and Gwynedd Council. 2017. Anglesey and Gwynedd Joint Local Development Plan 2011-2026. [Online]. [Accessed: 30 September 2017]. Available from: http://www.anglesey.gov.uk/planning-and-waste/planning-policy/joint-local-development-plan-anglesey-and-gwynedd/
RD8	Reading Agricultural Consultants. 2016. <i>Agricultural Land Classification and Soil Resources</i> . Reading: Reading Agricultural Consultants.
RD9	Department for Communities and Local Government. 2015. Compulsory purchase process and the Crichel Down Rules.

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